Video
FULL DETAILS AND TRANSCRIPT

Opportunities for Student Explanations

Normal Park Museum Magnet Elementary School, Tennessee
March 2008

Topic: How to Organize Your Teaching
Practice: Higher-Order Questions

Highlights

- At this school, the culminating project of each curriculum unit involves the creation of museum exhibits to demonstrate student learning and understandings.
- The exhibits are designed to answer the essential questions of the curriculum unit.
- On Exhibit Night, students give tours to visitors who come to the school, which is an opportunity for students to practice giving clear and accurate explanations to an audience.

About the Site

Normal Park Museum Magnet Elementary School
Chattanooga, TN

Demographics
73.1% White
22.1% African American

1.5% Asian
2.1% Hispanic
1.2% Native American
36.2% Economically Disadvantaged

Normal Park Museum Magnet staff plan curriculum in grade-level teams to organize instruction that promotes student understanding and retention of key concepts. Distinctive features of the school includes:

- Nine-week interdisciplinary curricular modules based on "essential questions" and "enduring understandings"
- Weekly learning expeditions to partner museums that connect abstract concepts taught in modules to concrete and real-life experiences
- Quarterly Exhibit Nights where students create displays and act as museum docents to demonstrate their understandings
- Differentiated instruction in reading, math, and spelling where individualized lessons are designed to alternate between teacher modeling and student practice
- Socratic Seminars, text- or art-based discussions where teacher questioning leads students to explore of key ideas through a cooperative process
- Hands-on, intensive professional development in the summer and throughout the year

Full Transcript

When student work is displayed in our school, there is always a label that goes with that artwork or sculpture or whatever else is on display. And to get the information on those labels, teachers give what we call prompts—open-ended prompts; those usually are aimed towards our essential questions. Students write answers to those prompts, which become labels. So we're able to go through the school and get a sense, by reading those labels, of whether students really understand the key concepts and the big ideas. There are certain essential questions that are seen throughout a student's experience here, so some of those big, overarching questions students come back to over and over and over again to different levels of depth.

Student: There are many adaptations and this is one of them, they're called swim bladders. A swim bladder is very important to a fish because their fins don't really help them swim up or down, so they use swim bladders. When they breathe in, since they are inhaling more air, just like a balloon, it goes up. So a fish goes up. But when they breathe out, it's the opposite; they go down, they sink. But their fins just help them go side to side. They don't really help them go up. The balloons that we're experimenting, they are the same thing as…we can't get real fish and experiment on them, so we are using balloons, they are like them. There is one that's inflated and we put it down and see, it has a harder time sinking, so you will see that's

why what it's like for fish. And with these, the uninflated balloons, they are easier to go down just like a fish would. It's not like when they breathe out, they can't go down, it's just easier. And that's what swim bladders are.

This wall shows all the fish that we did research on; each person got to do a research on their own fish. Each animal has a special adaptation. My animal was a puffer fish and it has a very cool adaptation. Whenever it gets scared or to attack, it can puff up into a ball with spikes around it and the spikes are actually poisonous.

Student: The okapi has to live on the forest floor because the forest floor actually has these colors. Like it has brown colors, a little peachy color, some stripes over here and this gray on it, and mostly the rocks are gray and stuff, and this animal has to live on the forest floor because it actually blends into it.